

Claims:

1. (Currently amended) A wireless extension for transmitting analog and digital television signals from one location to another comprising:

a sending unit comprising:

a remote control interface for receiving a channel selection command;

at least one tuner for receiving both analog and digital television signals responsive to the remote control interface with an RF input and a tuner output;

a digital demodulator for receiving the tuner output and producing a digital stream containing MPEG encoded program information;

an MPEG demultiplexer for receiving the MPEG information from the digital demodulator and selecting at least one MPEG program to produce a first MPEG stream;

an MPEG encoder receiving the tuner output and producing a second MPEG stream;

a selector responsive to the remote control interface for selecting between the first MPEG stream and the second MPEG stream, wherein an active MPEG stream is selected; and

a modulator and transmitter for producing an RF signal to transmit the selected MPEG stream;

a receiving unit comprising:

a receiver for receiving the RF signal; and

an MPEG demultiplexer/decoder for demultiplexing the desired program and converting the MPEG program to a signal suitable for driving a television receiver.

2. (Currently amended) The wireless extension of claim 1 further comprising:

in the ~~transmitting~~ sending unit a means for encryption of the selected MPEG program; and

in the receiving unit a means for decryption of the received signal.

3. (Original) The wireless extension of claim 2 further comprising:

a public key exchange wherein a public key is transmitted from the receiving unit to the sending unit.

4. (Original) The wireless extension of claim 1 further comprising:

5 in the receiving unit a conditional access unit that receives information to enable decoding of the MPEG program.

5. (Original) The wireless extension of claim 1 further comprising:

10 a digital lock detector in the digital demodulator for detecting a digital signal lock condition;
an analog lock detector in the MPEG decoder for detecting an analog signal lock condition;
control logic circuitry responsive to the digital lock detector and the analog lock detector with an
output to the selector to select an active MPEG stream from the source indicating a lock condition.

15 6. (Currently amended) The wireless extension of claim 1 further comprising:

in the ~~transmitter~~ sending unit a programmable transmit power level circuit responsive to power level
commands from the remote control.

20 7-14. (Canceled)